# Crime Analysis Mapping

NAME: ARCHANA AP

ROLL NO: 10

PRODUCT OWNER: Mr.Balachandran KP

## Table of Content

- Abstract
- Modules
- Data Flow Diagram
- Table Design
- Developing Environment
- User Stories
- Product Backlog
- Project Plan
- Sprint plans
- Sprint Actual

#### **ABSTRACT**

- Crimes are one of the most predominant problems that is happening in most of the urban areas in the world. There are a lot of different types of crimes that happen, including robbery, theft of vehicles, etc. As crime increases, the investigation process gets longer and more complicated.
- In this project, Crime Analysis in assisting police and helps in reduction and prevention of crimes and crime disorders using data mining tools. We collect the data from police department and try to get each and every detail, like the person's name, height, age, sex and fingerprint details. Once we get the information, we start to process the data.
- The use of information mining methods helps in resolving most complicated criminal cases. Evidence based research helps in analyzing the crimes. We calculate the crime rate based on the previous data using data mining techniques. We can identity the highest risk crime zones with the help of data mining techniques.

### Apriori Algorithm

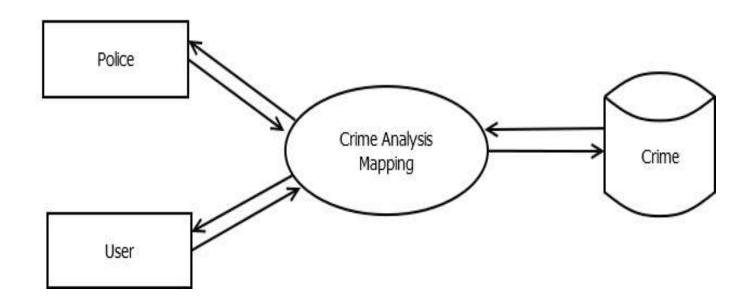
Apriori is an algorithm for frequent itemset mining and association rule learning over relational databases. It proceeds by identifying the frequent individual items in the database and extending them to larger and larger item sets as those item sets appear sufficiently often in the database.

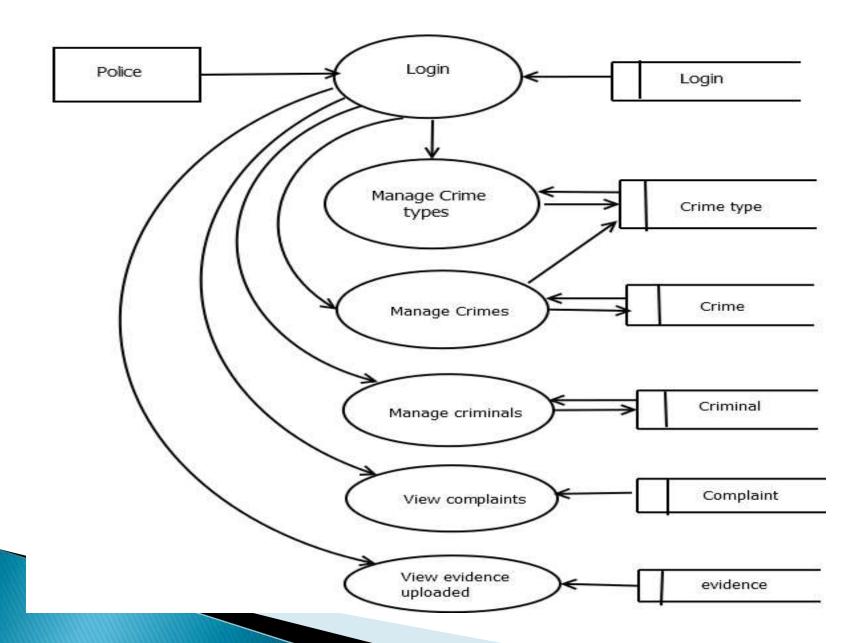
#### **MODULES**

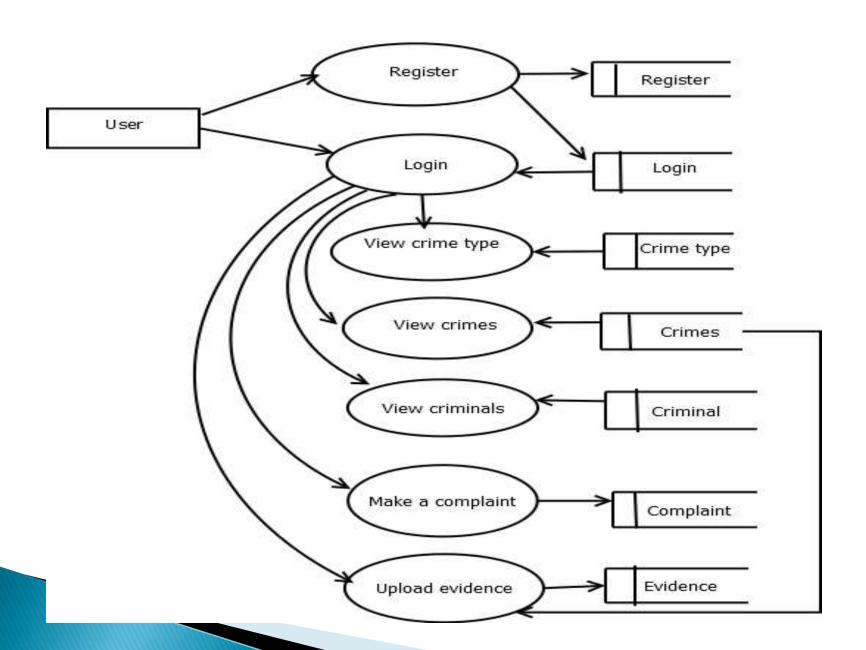
- Police
- User
- Police:
- Login
- Manage crime types
- Manage crimes
- Manage criminals
- View complaints
- View evidence uploaded
- Public User:
- Register
- Login
- View crime types
- View crimes
- View criminals
- Make a complaint
- Upload evidence (if any)

## DATA FLOW DIAGRAM

Level 0



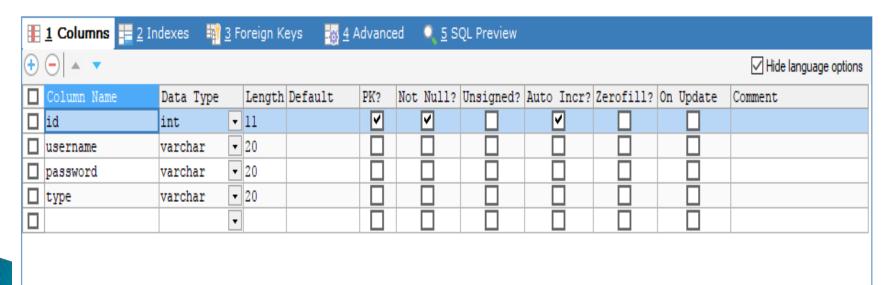




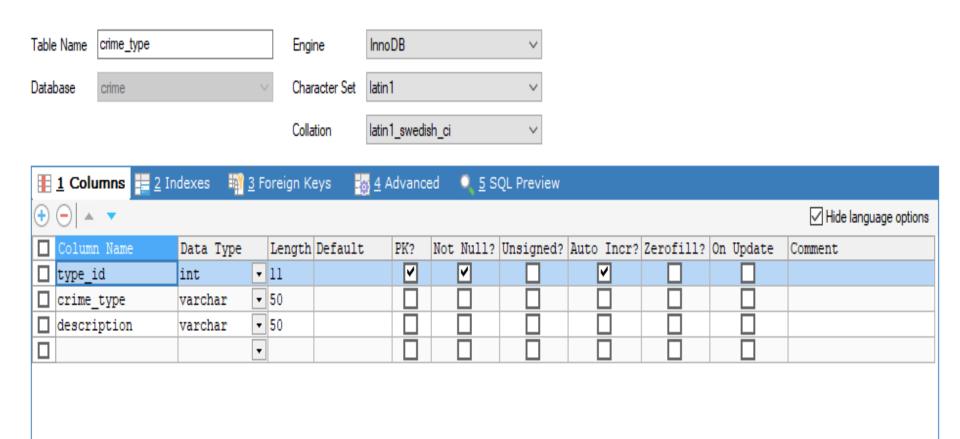
# Table Design

#### Login

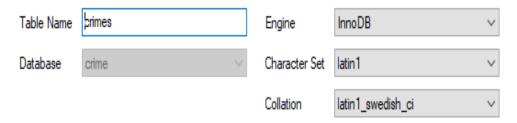
Table Name	ogin	Engine	InnoDB ~	
Database	crime	Character Set	latin1 ~	
		Collation	latin1_swedish_ci ~	

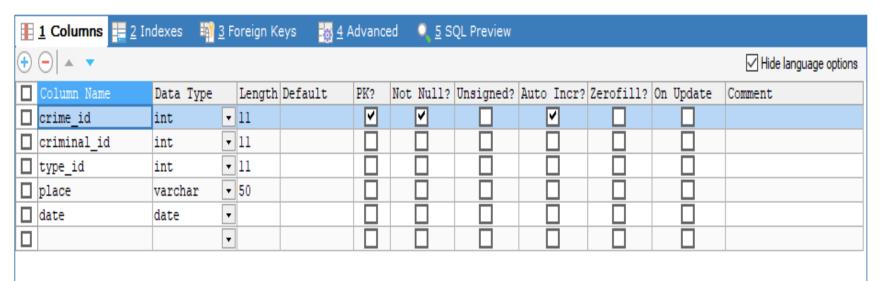


#### Crime type

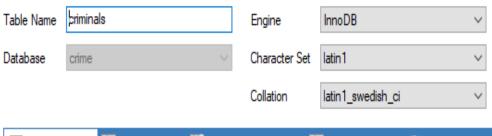


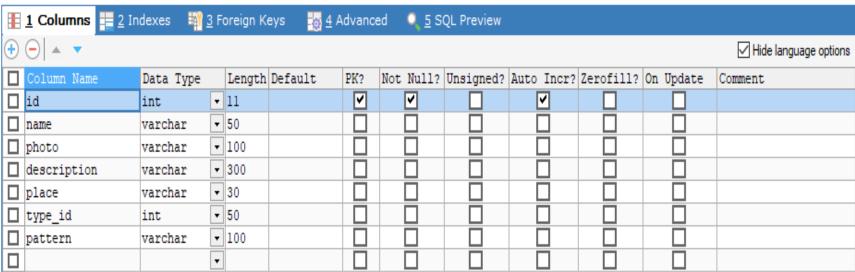
#### Crimes





#### Criminals





## **Developing Environment**

operating system: windows 10 & above

front end: html, css, javascript

back end: mysql

ide used: jetbrains pycharm, android studio

technology used: python java

frame work used: flask

#### **USER STORY**

User Story ID	As a <type of="" user=""></type>	I Want to <perform Some Task&gt;</perform 	So that I can <achieve goal="" some=""></achieve>
1	Police	Login	Login successful with correct username and password
2	Police	Manage crime types	Add and manage crime types
3	Police	Manage crimes	Add and manage crimes
4	Police	Manage criminals	Add and manage criminal information
5	Police	View complaints	View complaints from user
6	Police	View evidence uploaded	View evidence uploaded by user
7	User	Registration	User registration by personal information
8	User	Login	Login by username and password
9	User	View crime types	View registered crime types
10	User	View crimes	View registered crimes
11	User	View criminals	View registered criminals
12	User	Make a complaint	Send a new complaint
13	User	Upload evidence	Upload evidence for complaint

## PRODUCT BACKLOG

User Story ID	Priority <high low<br="" medium="">&gt;</high>	Size (Hours)	Sprint <#>	Status <planned in<br="">progress/Completed &gt;</planned>	Release Date	Release Goal		
1	Medium	2	1	Completed	16-01- 2022	Table design		
2	High	3		Completed	16-01- 2022	Form design		
3	High	5		Completed	16-01- 2022	Basic coding		
4	Medium	5	2	Planned		Crime and criminal management		
5	High	5		Planned		Pre-processing		
6	High	5	3	Planned		Frequent item set mining		
7	high	5		Planned		Location based information		
8	Medium	5	4	Planned		Testing data		
9	High	5		Planned		Output generation		

# PROJECT PLAN

<b>User Story ID</b>	Task Name	Start Date	End Date	Days	Status
1	Sprint 1	26-12-2021	28-12-2021	5	Completed
2		29-12-2021	31-12-2021		Completed
3		03-01-2022	08-01-2022	5	Completed
4	Sprint 2	09-01-2022	16-01-2022	4	Planned
5		18-01-2022	22-01-2022		Planned
6	Sprint 3	23-01-2022	27-01-2022	8	Planned
7		30-01-2022	05-02-2022		Planned
8	Sprint 4	06-02-2022	10-02-2022	4	Planned
9		16-02-2022	19-02-2022		Planned

### **SPRINT PLAN**

08-01-

16-01-

22-01-

27-01-

05-02-

10-01-

19-02-

coding

**Pre-processing** 

Testing data

User story #9

Total

Output generation

User Story #4,#5,#6,#7,#8

Frequent item set mining

Location based information

Crime and Criminal management

Backlog item	Status & Compl etion date	Origin al Estim ate in hours	Day 1	Da y 2	Day 3	Day 4	Da y 5	Day 6	Day 7	Day 8	Da y 9	Day 10	Day 11	Day 12	Day 13
User Story #1,2		Hours	Hours	Ho urs	Hour s	Hou rs	Ho urs	Hou rs	Hou rs	Hou rs	Ho urs	Hour s	Hour s	Hour s	Hour s
Table design	28-12- 2021	2	1	1	0	0	0	0	0	0	0	0	0	0	0
Form design	31-12-	3	0	0	0	1	1	1	0	0	0	0	0	0	0

Н 

S

# SPRINT ACTUAL Status & Origin D

BacklogItem

Testing data

**User story** 

Output generation

Total

10

	completi on date	al estimat e in hours	ay 1	ay 2	ay 3	ay 4	ay 5	ay 6	у7	ay 8	ay 9	y1 0	y1 1	y1 2	y1 3	y1 4
User story#1,#2		hrs	hr s	hr s	hr s	hr s	hr s	hr s	hrs	hr s	hr s	hrs	hrs	hrs	hrs	hrs
Tabledesign	28/12/ 2021	3	1	1	0	0	0	0	0	0	0	0	0	0	0	0
Form design	31/12/ 2021	2	0	0	0	1	1	1	0	0	0	0	0	0	0	0
Coding	08/01/ 2022	5	0	0	0	0	0	0	0	0	0	1	1	1	1	1
User story#4,#5,#6,# 7,#8																
Crime and criminal management																
Pre-processing																
Frequent item set mining																
Location based information																

Da

0

Da

Da

Da

Da

Da

# Thank you